

DaimlerChrysler AG

Patent claims

5 1. A locking device (5) for locking a filler neck compartment cover of a vehicle that can be moved into an open position and into a closed position, having a locking element (20) for blocking the filler neck compartment cover in the closed position and having a
10 servo drive (19) for displacing the locking element (20) from a release position into a blocking position, characterized in that the locking device (5) is designed as a preassembled, modular unit and can be fastened in the edge region of a mounting opening (3)
15 provided in a body part (1) and serving to house a filler neck compartment (7).

2. The locking device as claimed in claim 1, characterized by an engagement opening (35) for a
20 mating element on the filler neck compartment cover that interacts with the locking element (20).

3. The locking device as claimed in claim 1 or 2, characterized by a filler neck compartment cover
25 lifting means (21) comprising a push-push mechanism.

4. The locking device as claimed in one of claims 1 to 3, characterized in that the servo drive (19) and the filler neck compartment cover lifting means (21)
30 are themselves each designed as modular units and are preferably detachably connected to one another.

5. The locking device as claimed in one of claims 1 to 4, characterized by at least one retaining groove
35 (41) which can be pushed onto a retaining flange (43), the retaining flange (43) being located in or on the mounting opening (3).

6. The locking device as claimed in claim 5, characterized in that the retaining groove (41) is provided on a housing (33) of the filler neck compartment cover lifting means (21).

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7. The locking device as claimed in one of claims 1 to 6, characterized in that the filler neck compartment cover lifting means (21) has at least two retaining webs (37, 39) arranged at a distance from one another and in that each of the retaining webs (37, 39) has a retaining groove (41).

8. The locking device as claimed in one of claims 1 to 7, characterized in that, when in the mounted state, the filler neck compartment (7) engages into the free space between the retaining webs (37, 39), and in that the filler neck compartment (7) can be fastened to the filler neck compartment cover lifting means (21), in particular to the retaining webs (37, 39), and/or to the body part (1).

9. The locking device as claimed in one of claims 1 to 8, characterized in that the housing (33) of the filler neck compartment cover lifting means (21) is made of plastic.

10. The locking device as claimed in one of the claims, characterized in that a guide (27) for the locking element (20) is provided on the servo drive (19).

11. The locking device as claimed in claim 10, characterized in that the guide (20) is formed on a section (29) of a housing (25) of the servo drive (19).

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12. A method of mounting a locking device (5) as claimed in one of claims 1 to 11 and a filler neck compartment (7) in a mounting opening (3) of a body part (1), it being possible to fit the filler neck

compartment (7) into the mounting opening (3) from the outside, characterized in that the locking device (5) designed as a preassembled, modular unit is introduced into the mounting opening (3) from the outside and is
5 connected in a force- and/or form-fitting manner to the body part (1), and in that the filler neck compartment (7) is then fitted into the mounting opening (3) from the outside and is fastened to the filler neck compartment cover lifting means (21) and/or to the body
10 part (1).

13. An arrangement of a locking device (5) as claimed in one of claims 1 to 11 on a vehicle having a body part (1) with a mounting opening (3) for a filler neck
15 compartment (7), characterized in that the locking device (5) designed as a preassembled, modular unit is, when in the installed state, arranged in a region which is accessible from the outside via the mounting opening (3).

20 14. The arrangement as claimed in claim 13, characterized in that the locking device (5) is fastened to the body part (1) in the edge region of the mounting opening (3), preferably directly on the edge
25 thereof.

15. The arrangement as claimed in claim 13 or 14, characterized in that, when the locking device (5) is in the installed state, the servo drive (19) rests on
30 the inside of the body part (1).